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PREBID REPORT

The meeting for the Pre-bid discussion was held online **on 21/11/2025 from 03.00 PM onwards** for CPPP e- bidding for the **Supply, Installation and Commissioning of NMR Spectrometer (400 MHZ and 500MHZ)**.

The report of the meeting is as mentioned below.

Instrument: Queries for 400MHz Solution State NMR

Sl. No.	Query Raised By	Reference Document	Query raised	Response from IITI
01.	1. JOEL India Limited	**Section V Part-2 Technical Specification** S.no 1 Point No 8 **Magnet system:** Number of Cryo Shims: 14 or more	JEOL JNM-ECZL400s 400MHz NMR has 9 Cryo shims. We request you to please mention the Cryo shim as 9 or better	**Accepted** Sr.1 Point:8 Number of Cryo Shims: 9 or better
02.		**Section V Part-2 Technical Specification** S.no 1 Point No 9 **Magnet system:** Number of RT Shims: Minimum 36	JEOL JNM-ECZL400s 400MHz NMR has 25 Cryo shims. We request you to please mention Cryo shim as 25 or better	**Accepted** Sr.1 Point:9 Number of Cryo Shims: 25 or better
03.		**Section V Part-2 Technical Specification** S.no 2 Point No 3 **Spectrometer Console:** 2-channel Amplifier system: Multi-receiver capability	Our system comes with a single receiver for two-channel spectrometers. So, we request you to kindly amend the specification to **single/multi-receiver** for two-channel spectrometers. It is possible to perform all routine and advanced NMR applications with Two channel spectrometer with single receiver ([1D, 2D NMR with multinuclear observations, & 2D NOESY, ROESY, DOSY, COSY, TOCSY, HSQC, HMBC, CPMG, T1, T2, water suppression and even Solid-state special experiments like HETCOR, DQ/SQ, MQMAS, wPMLG, REDOR etc.] and many more are possible with the standard NMR Spectrometer. Multi-receiver (two-receiver with two channels) design is a Bruker design that makes lock-out specifications to a single vendor (Bruker). This will make only Bruker can quote the high value of the product that really does not have any practical usage. We can perform and reduce the 2D experiment time by using NOAH sequence We request you to kindly remove dual receiver mode	**Partially Accepted** Sr.2 Point:3 Reason: Our research Students use NMR for titration experiments that require simultaneous **monitoring of two nuclei; therefore,multi-receiver capability is mandatory**. As per our discussion during the prebid meeting, JEOL systems with three receiver channels can do such observation, hence a channel system can be offered by them, it will be accepted. **In addition, system should be capable of reducing 2D experiment time by using NOAH sequence.**

04		**Section V Part-2 Technical Specification** S.no 2 Point No 7 Gradient system: 40G/cm	We request you to kindly amend the gradient strength to 30 G/cm or more. **Justification:** A maximum gradient strength of 30 G/cm is technically more than sufficient for all solution-state NMR applications requiring pulsed field gradients. In most NMR pulse sequences, gradient pulses are used primarily for coherence pathway selection, suppression strategies, and phase cycling purposes. These applications typically demand relatively low gradient strengths, and the required values for effective dephasing and rephasing rarely exceed 20 G/cm. Furthermore, a 30 G/cm gradient strength fully supports advanced experiments such as DOSY, diffusion-ordered spectroscopy, and other multidimensional techniques that utilize gradient-based methods. This capability ensures optimal gradient shimming performance and robust water suppression without compromising experimental quality or flexibility. Given that 30 G/cm meets all scientific and operational requirements for solution-state NMR, we kindly request that the specification be amended accordingly to ensure fair participation while maintaining full technical compliance.	**Accepted** Gradient system: **30G/cm**

Instrument: 500 MHz Solid State NMR

Sl. No.	Query Raised By	Reference Document	Query raised	Response from IITI
01	1. JOEL India Limited	**Section V Part-2 Technical Specification** S.no 1 Point No iv **Magnet system**: Liquid Helium Hold time: 365 Days	JEOL JNM-ECZL500G has helium hold time as 280 Days. Liquid Helium requirement: 66 Liters. We request you to kindly amend the Helium hold time as 280 days or better.	**Accepted** Sr:1 Point: iv Liquid Helium Hold time: 280 Days or more
02		**Section V Part-2 Technical Specification** S.no 1 Point No ix **Magnet system**: Cryo Shims: 14 Nos	JEOL JNM-ECZL500G 500MHz NMR has 9 Cryo shims. We would also like to mention that we have 44 RT shims (best in class). We request you to please mention Cryo shim as 9 or better.	**Accepted** Sr:1 Point: ix Cryo Shims: 9 or more
03		**Section V Part-2 Technical Specification** S.no 2 Point No vi Spectrometer Console: Amplifier System: 500W for 1H/19F and 500W for X nuclei	JEOL JNM-ECZL500G 500MHz NMR has 100W/300W ; 200W/500W and 500W/1000W power amplifiers. We request you to kindly improvise the specifications to • 200 W and 500 W OR • 500 W and 1000 W	**Accepted** Sr:2 Point: vi Amplifier System: 200W for 1H/19F and 500W for X nuclei
04		**Section V Part-2 Technical Specification** S.no 2 Point No vii Spectrometer Console: Electronics should be capable of handling/executing multi receiver experiments for simultaneous acquisition of 1D,1H/15N, 1H/19F, 1H/1P, one dimensional experiment in dual receiver mode.	Our system comes with a single receiver for two-channel spectrometers. So, we request you to kindly amend the specification to **single/multi-receiver** for two-channel spectrometers. It is possible to perform all routine and advanced NMR applications with Two channel spectrometer with single receiver ([1D, 2D NMR with multinuclear observations, & 2D NOESY, ROESY, DOSY, COSY, TOCSY, HSQC, HMBC, CPMG, T1, T2, water suppression and even Solid-state special experiments like HETCOR, DQ/SQ, MQMAS, wPMLG, REDOR etc.] and many more are possible with the standard NMR Spectrometer. Multi-receiver (two-receiver with two channels) design is a Bruker design that makes lock-out specifications to a single vendor (Bruker). This will make only Bruker can quote the high value of the product that really does not have any practical usage. We can perform and reduce the 2D experiment time by using NOAH sequence as well. We request you to kindly remove this point.	**Partailly Accepted** Response remains same as above on Sr. No. 3 (400 MHz NMR Section)
05		Deliver Period: 60 Days from the date of purchase order:	• For 400MHz NMR: We request you to please specify delivery period as 4 months from the date of LC. • For 500Mhz NMR: As the specified configuration is high-end, we request you to please specify delivery period as 10 months from the date of LC.	**Accepted**

06	2. Bruker	Page 2 of 43: EMD amount of INR28,60,000 Online Transfer	Due to Global Finance Guidelines, Online transfer is restricted to maximum of INR5,00,000 therefore we want to submit EMD in the form of Bank Guarantee for the amount of INR28,60,000 instead online transfer. Please confirm.	Accepted The Bank Guarantee should be valid for 180 days from the date of commencement of the tender submission closing date and must be issued by a Scheduled Commercial Bank in India.
07	Bruker	BOQ	For the procurement of the 400MHz and 500MHz NMR systems, there are certain locally sourced items, such as the UPS and air compressor, that will be supplied from within India and therefore quoted in INR. To accommodate this, we require a separate tab for each system to list and quote these local items individually in BOQ, rather than including their costs in the overall system price quoted in a foreign currency.	**Accepted** Approprite changes will be done on CPPP portal Please refer the **Annexture "A"** for BOQ

All prospective/willing bidders are requested to take note of this report as part of the Tender document. All other terms and conditions of the tender remain unchanged.

23/12/25

Assistant Registrar (R&D MMS)

सहायक कुलसचिव
(अनुसंधान एवं विकास सामग्री प्रबंधन विभाग)
Assistant Registrar
(R&D-Materials Management Section)

Annexure "A" (It should be mentioned on BOQ-Sheet3)

S.No.	Item Description	Item	Qty	Currency	Basic Rate in Figures To be entered by the Bidder	GST Amount @18% on Basic Rate if Quoted	Total Amount	Remarks
1	2	3	4	5	6	7	8	9
400 NMR:								
1	Air Compressor-An ISO-9001 certified 3 HP Scroll oil-free air compressor complete with dry spell dryer and capable of catering all the needs. It should have a big buffer tank of at least 90 L capacity.	Item 1						
2	UPS System: A branded ISO-9001 certified online UPS (at least 5 KVA or rating compatible with the NMR system) with isolation transformer for the whole system with a minimum backup of 1 hour.	Item 2						
500 NMR:								
1	Air Compressor : An ISO-9001 certified 5HP scroll type (oil and moisture free) air compressor compatible with the instrument with an additional (min of 180L) S.S. buffer tank and one active alumina-based pressure swing dryer with suitable connectors fittings and filters	Item 3						
2	UPS System: A branded ISO-9001 certified online UPS (at least 15 KVA or rating compatible with the NMR system) with isolation transformer for the whole system with a minimum backup of 1 hour.	Item 4						

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